

WHAT IS CLAIMED IS:

1. Double-apron drafting unit for spinning machines, comprising a delivery roller pair having a delivery nipping line, also comprising an apron pair, arranged upstream thereof and guiding a fiber strand in the area of the delivery nipping line, and forming together with said delivery roller pair a wedge-shaped gap, as well as air flow control means for keeping air currents circulating with the delivery roller pair away from the area of the delivery nipping line,

wherein the air flow control means are arranged outside of the wedge-shaped gap formed by the delivery nipping line and the apron pair, but in direct proximity of the delivery roller pair and the apron pair.

2. Double-apron drafting unit according to claim 1, wherein the air flow control means include boundary layer interrupting means for interrupting a boundary layer of air currents provided at at least one roller of the delivery roller pair.

3. Double-apron drafting unit according to claim 2, wherein the boundary layer interrupting means are at a preferably adjustable distance with respect to the periphery of the respective roller.

4. Double-apron drafting unit according to claim 2, wherein the boundary layer interrupting means come into contact with the periphery of the respective rollers.

5. Double-apron drafting unit according to claim 4, wherein the boundary layer interrupting means comprise a circulating roller.

6. Double-apron drafting unit according to claim 4, wherein the boundary layer interrupting means comprise a brush or the like.
7. Double-apron drafting unit according to claim 2, wherein the boundary layer interrupting means comprise a suction device.
8. Double-apron drafting unit according to claim 3, wherein the boundary layer interrupting means comprise a suction device.
9. Double-apron drafting unit according to claim 4, wherein the boundary layer interrupting means comprise a suction device.
10. Double-apron drafting unit according to claim 5, wherein the boundary layer interrupting means comprise a suction device.
11. Double-apron drafting unit according to claim 6, wherein the boundary layer interrupting means comprise a suction device.
12. Double-apron drafting unit according to claim 2, wherein the boundary layer interrupting means are disposed in a peripheral area of between 30° and 60° of the respective rollers of the delivery roller pair.
13. Double-apron drafting unit for spinning machines, comprising:
 - a delivery roller pair forming a delivery nipping line,
 - an apron pair arranged upstream of the delivery roller pair, said apron pair forming a wedge-shaped gap together with the delivery roller pair, and

air flow control structure operable to keep air currents circulating with the delivery roller pair away from the delivery nipping line, said air flow control structure being disposed outside the gap in direct proximity of the delivery roller pair and the apron pair.

14. Double-apron drafting unit according to claim 13, wherein the air flow control structure comprises boundary layer interrupting structure operable to interrupt boundary layers of the air currents at at least one roller of the delivery roller pair.

15. Double-apron drafting unit according to claim 14, wherein the boundary layer interrupting structure includes a suction device which faces a respective delivery roller surface adjacent the gap.

16. Double-apron drafting unit according to claim 14, wherein the boundary layer interrupting structure includes a suppressing cover which faces a respective delivery roller surface and is spaced therefrom by less than .2 mm.

17. Double-apron drafting unit according to claim 16, wherein the boundary layer interrupting structure includes a suction device which faces a respective delivery roller surface adjacent the gap, said suction device being operable to suck air through the suppressing cover.

18. Double-apron drafting unit according to claim 16, wherein the suppressing cover extends over 30° to 60° of the circumference of a respective delivery roller surface.

19. Double-apron drafting unit according to claim 14, wherein the boundary layer interrupting structure engages a portion of the respective delivery roller surface.

20. Double-apron drafting unit according to claim 19, wherein the boundary layer interrupting structure includes a roller with pockets facing a portion of a respective delivery roller surface.

21. Double-apron drafting unit for spinning machines, comprising:
a delivery roller pair forming a delivery nipping line,
an apron pair arranged upstream of the delivery roller pair, said apron pair forming a wedge-shaped gap together with the delivery roller pair, and
air flow control means operable to keep air currents circulating with the delivery roller pair away from the delivery nipping line, said air flow control means being disposed outside the gap in direct proximity of the delivery roller pair and the apron pair.